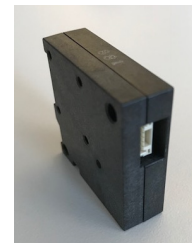


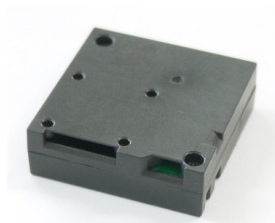
## SN-GCJA5 Particulate Matter Laser Sensor

- On board Laser Diode provides Particulate Matter detection for indoor air quality ( $\pm 10\%$ , from low to high concentrations  $\sim 1,000 \mu\text{g}/\text{m}^3$ )
- Output mass-density value of PM1.0, Pm2.5 and PM10 ( $\mu\text{g}/\text{m}^3$ )
- Minimum detectable particle:  $0.3 \mu\text{m}$
- Very small footprint:  $37 \times 37 \times 12 \text{mm}$
- Weight: 13g
- Extended lifetime optimized by S/W control
- Optimized air pathway design to minimize dust accumulation
- High S/N



**NEW**

### ■ SN-GCJA5



Power supply voltage	5.0V ( $\pm 10\%$ )
Consumption current	Below 100mA
Minimum detectable particle	$0.3 \mu\text{m}$
Indicatable range	(UART) $0 \mu\text{g}/\text{m}^3 \sim 2,000 \mu\text{g}/\text{m}^3$ (I <sup>2</sup> C) $0 \mu\text{g}/\text{m}^3 \sim \text{x,xxx} \mu\text{g}/\text{m}^3$
Maximum consistency error	$\pm 10\%$ $35 \mu\text{g}/\text{m}^3 < \text{ } < 1,000 \mu\text{g}/\text{m}^3$
Response time	1sec (Time to first reading 8sec)
External interface	I <sup>2</sup> C & UART
Size	$W37 \times D37 \times H12 \text{mm}$

### ■ Typical Sources of Particulate Matter:

- |  |  |
|--|--|
| ✓ Dust, fly ash, soot, smoke, aerosols, fumes, mists and condensing vapors | ✓ Agriculture (source of ammonium).                                |
| ✓ Combustion engines (diesel and petrol)                                   | ✓ Nitrogen oxides (emitted by traffic and industrial processes)    |
| ✓ Solid-fuel (coal burning, heavy oil and biomass)                         | ✓ Sulfur dioxide (from the combustion of sulfur-containing fuels). |
| ✓ Cooking / smoking of plant matter, Fireplaces, Furnaces                  | ✓ Power-plant boilers to ship boilers, central steam-heat boilers  |
| ✓ Construction materials   | ✓ Waste incineration / local field burning                         |
| ✓ Building, demolition, mining, manufacture of cement and smelting         | ✓ House and forest fires   |
| ✓ Pavement erosion by road traffic /abrasion of brakes and tires.          | ✓ Etc...   |

Products and product specifications shown are subject to change without notice.

Please contact your local Panasonic Technical Representative for the most up to date information.

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